

Mathematics Lesson Self Evaluation

How well does the lesson satisfy each of the following?

Establish Mathematics Goals to focus learning	
Clear goals are established for the mathematics that students are learning	
Goals are properly situated with learning progressions	
Teacher uses goals to guide their instructional decisions	

Implement tasks that promote reasoning and problem-solving	
Tasks encourage high-level thinking	
Tasks provide for exploration and solving problems that build on and extend current mathematical understanding	
Teacher encourages students to use varied approaches and strategies to make sense of and solve tasks	
Students are using tools and representations as needed to support their thinking and problem solving.	

Use and connect mathematical representations	
Teacher introduces forms of representations that are useful to the student	
Teacher asks students to make math drawings or use other visual supports to explain and justify their reasoning.	
Teacher selects tasks that allow students to decide which representations to use in making sense of the problems.	
Students use multiple forms of representations to make sense of and understand mathematics.	

Facilitate Meaningful Mathematical Discourse	
Teacher engages students in purposeful sharing of mathematical ideas, reasoning, and approaches.	
Teacher facilitates discourse among students by allowing them to explain and defend their approaches.	
Students listen carefully to and critique the reasoning of peers, using examples to support or counterexamples to refute arguments.	

Pose Purposeful Questions	
Teacher advances student understanding by asking questions that build on, but do not take over student thinking.	
Teacher asks questions that go beyond gathering information to probing thinking and requiring explanation and justification.	
Teacher asks intentional questions that make the mathematics more visible and accessible for student examination and discussion.	
Teacher allows sufficient wait time so that more students can formulate and offer responses.	

Build Procedural Fluency from Conceptual Understanding	
Teacher provides students with opportunities to use their own reasoning strategies and methods for solving problems.	
Teacher asks students to discuss and explain why the procedures that they are using work to solve particular problems.	
Teacher connects student- generated strategies and methods to more efficient procedures as appropriate.	

Support Productive Struggle in Learning Mathematics	
Teacher anticipates what students might struggle with during a lesson and is prepared to support them productively through the struggle.	
Teacher gives students time to struggle with tasks, and asking questions that scaffold students' thinking without stepping in to do the work for them.	
Teacher helps students realize that confusion and errors are a natural part of learning, by facilitating discussions on mistakes, misconceptions, and struggles.	
Teacher praises students for their efforts in making sense of mathematical ideas and perseverance in reasoning through problems.	

Elicit and Use Evidence of Student Thinking	
Teacher elicits and gathers evidence of student understanding at strategic points during instruction.	
Teacher interprets student thinking to assess mathematical understanding, reasoning, and methods.	
Teacher makes in-the-moment decisions on how to respond to students with questions and prompts that probe, scaffold, and extend.	
Teacher reflects on evidence of student learning to inform the planning of next instructional steps.	